

**Notice of Allowability**

Application No.

09/684,371

Examiner

David S. Kim

Applicant(s)

TUCKER ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08 December 2005.
2. ☒ The allowed claim(s) is/are 1 and 3-8 (renumbered as claims 1-7).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**AGUSTIN BELLO**  
**PRIMARY EXAMINER**

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Mark A. Wilson, Esq. on Thursday, 22 December 2005. The application has been amended as follows:

#### *In the claims*

**Claim 5** (renumbered as claim 4, status changes from withdrawn to allowed, no changes to the claim text). The system of claim 1 wherein said optical pre-selector is optically arranged to filter said combined optical signal within said third optical path.

**Claim 6** (renumbered as claim 5, status changes from withdrawn to allowed, no changes to the claim text). The system of claim 5 further including means, located optically between said optical combining means and said photodetector, for tapping a portion of said combined optical signal and for forwarding said tapped portion of said combined optical signal to said adjusting means, said tapped portion of said combined optical signal including said portion of said swept local oscillator signal.

#### *In the specification*

On page 24, line 17, replace "photodetector 1812" with -- photodetector 1712 --.

#### *In the abstract* (additions are the underlined portions, deletions are the strikethrough portions)

An optical heterodyne detection system includes a tunable optical pre-selector that is adjusted to track the frequency of a swept local oscillator signal. The tunable optical pre-selector is adjusted in response to a measure of the frequency of the swept local oscillator signal and in response to a measure of a portion of the swept local oscillator signal after the portion of the swept local oscillator signal has optically interacted with the optical pre-selector. In an embodiment, at least some portion of the swept local oscillator signal is modulated before it interacts with the optical pre-selector. ~~In another~~

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~~embodiment, the optical pre-selector is dithered such that a dither is imparted on the portion of the swept local oscillator signal that interacts with the optical pre-selector.~~ In an embodiment, the portion of the swept local oscillator signal that interacts with the pre-selector is detected and used in a feedback control circuit to generate a control signal which causes the error between the center frequency of the pre-selector and the frequency of the swept local oscillator signal to be small.

2. The following is an examiner's statement of reasons for allowance of claims 5-6 (now renumbered as claims 4-5):

In an Office Action mailed to Applicant on 12 June 2003, a restriction requirement was presented. Applicant was required to elect one species out of four species identified by the Office. Additionally, the Office presented a provision for the consideration of claims to non-elected species:

"Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141" (mailed on 12 June 2003, page 2).

Accordingly, since claim 1 is allowed and generic to elected Species III (shown in Fig. 16) and non-elected Species I (shown in Fig. 8), Applicant is entitled to consideration of withdrawn claims to non-elected Species I, which are written in dependent form or otherwise include all the limitations of allowed generic claim 1 as provided by 37 CFR 1.141. Claims 5-6 correspond to Species I. After consideration of claims 5-6, Examiner determines that claims 5-6 are also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

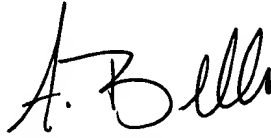
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Kim whose telephone number is 571-272-3033. The examiner can normally be reached on Mon.-Fri. 9 AM to 5 PM (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DSK



**AGUSTIN BELLO**  
**PRIMARY EXAMINER**